CONTRACEPTIVE KNOWLEDGE, ATTITUDE AND PRACTICE SURVEY

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CERTIFICATE

This is to certify that the dissertation entitled "**CONTRACEPTIVE KNOWLEDGE, ATTITUDE AND PRACTICE SURVEY"** is the bonafide original work of **Dr. E. INDHUMATHY THAYAR** in partial fulfilment of the requirements for **M.D. Branch – II (Obstetrics and Gynaecology)** Examination of the Tamilnadu Dr. M.G.R. Medical University to be held in March 2008. The period of study was from July 2006 to June 2007.

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DECLARATION

I, **Dr. E. INDHUMATHY THAYAR,** solemnly declare that dissertation titled, "**CONTRACEPTIVE KNOWLEDGE, ATTITUDE AND PRACTICE SURVEY"** is a bonafide work done by me at Govt. Stanley Medical College & Hospital during 2005-2008 under the guidance and supervision of my Chief **Prof. Dr. FAMIDHA, M.D. , D.G.O.**

The dissertation is submitted to Tamilnadu, Dr. M.G.R. Medical University, towards partial fulfillment of requirement for the award of **M.D. Degree (Branch – II) in Obstetrics and Gynecology.**

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CONTENTS

INTRODUCTION

With a Population of 1049 million by the year 2002, India is the second must popular country in the world next only to china, where as seventh in land area with only 2.4% of World's land area, India is supporting about 16.87% of World's population.

Demographic & Socioeconomic features of India are as follows :

- Literacy rate in 2001 was 65.38%, the female literacy being 54.16% (Census report 2001)
- In 1991, about 37% of Indian population was under the age of 15 (Census report 1991)
- The Gross National Product (GNP) per capita in 1997 was US $370 or about Rs.17,000.00(PRB.1991)
- Sex ratio is 933 females per 1000males (Census 2001)
- Density of population is 324 persons/ sq km (Census Report 2001)

- The projected life expectancy at birth during 2001-2006 is 64.1 for males and 65.4 for females (Register general of India. Report of the Technical group on population Projection, 1996)

- The infant mortality rate was 46.2% in 2000 (Govt. of India)

- The Total Fertility rate in 1999 was 3.2 (SRS India 1999)
- The Couple protection rate was 46.2% in 2000 (Govt. of India)

FAMILY WELFARE PROGRAMME

India was the first country in the world to formulate demographic goal and take up a government sponsored Family Planning Programme in Conjunction with first five year plan as early as in 1951 (1951-56).

In 1962-63, during the third plan period was a major change of strategy in the family planning programme. In the place of the clinic approach an extension approach was taking up.

Gradually a massive infrastructure was built up exclusively for the family planning programme with in the existing infrastructure of the health services. From the time onwards, the programme became a time bound target oriented one.

Another important feature of the programme is its complete integration with the Maternal and Child Health (MCH) care programme.

Family planning is a pillar of safe motherhood and is now seen as a human right. It is a cost effective method reducing maternal morbidity and mortality. Contraceptive methods have a considerable positive impact on maternal and infant health and population growth. It is a however unfortunate that a unwanted pregnancies and unsafe abortion still occur in large number. The WHO estimates that there are approximately 20 million unsafe abortion every year and estimates of maternal death as a result of abortion ranged between 60,000 to 1,00,000 per year (Bernstein & Rosenfield 1998) therefore Family Planning Programme are very important and should be readily accessible to the community.

KAP Survey was under taken to established the current situation with regard to contraceptive use . KAP surveys were started in the 1950 to measure the spread of Family Planning thought out the world by showing that there were many women who would like to space or limit their birth but who don't know about or have access to family planning services (sometimes called the KAP gap) they provided the first estimate of the need for FP.

RELEVANCE OF THE STUDY

In recent years, the need for such kind of studies was very important. Because most specific knowledge can be acquired about factor that determine the fertility and family acceptance. This inturn can be used to develop suitable programme for them.

OBJECTIVE OF THE STUDY

1. To study the knowledge about contraception,

2. Attitude towards contraceptive methods

3. Practice of Contraception in antenatal, postnatal women and women seeking MTP.

4. To identify the relationship between family planning and educational level.

5. To identify the main sources of information regarding family planning.

REVIEW OF LITERATURE

The expert committee of WHO defined family planning “as a way of thinking & liking that is adopted voluntarily, upon the basis of Knowledge, attitudes and responsible decisions by individuals and couples in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country”.

Another expert committee defined and described family planning as follows : Family planning refers to practices that help individuals or couples to attain certain objectives :

a) To avoid unwanted birth
b) To bring about wanted birth
c) To regulate the interval between pregnancies
d) To control the time at which birth occur in relation to ages of the parent and
e) To determine the number of children in the family.

BASIC HUMAN RIGHTS

The United Nations conference on human rights of Teheran in 1968 recognized family planning as a basic human rights

The Bucharest conference on the world population held in August 1974 endorsed the same view and stated in its “Plan of Action” that all couples have the right to decide freely and responsibly the member and spacing of their children to have information and education and means to do so.

SMALL FAMILY NORM :

The objectives of the family welfare programme in India is that people should adopt the small family norm to stabilize the country’s population at the level of some 1533 million by 2050 AD. And adopted the model of 3- child family.

In view of the seriousness of the situation, the 1980s campaign has advocated the 2-child norm.

ELIGIBLE COUPLE:

An Eligible couple refers to a currently married couple where in the wife is in the reproductive age, which is generally assumed to lie between the ages of 15 and 45. There will be at last 150 to 180 couples per 1000 population in India. These couples are in need of family planning services. About 20% eligible couples are found in the age group 15-24years.

TARGET COUPLES

In order to pinpoint the couples who are a priority group within the broad definition of eligible couples, the term target couple was applied to couples who have had 2-3 living children and family planning was largely directed to such couples.

COUPLE PROTECTION RATE:

Couple Protection Rate (CPR) is an indicator of the prevalence of Contraceptive practice in the community. It is defined as the percent of eligible couples effectively protected against child birth by one or other approved methods of family planning via sterilization, Intrauterine Device, condom or oral pills. Demographer are of the view that the demographic goal of Net Reproductive

Rate =1can be achieved only if the Couple Protection Rate exceeds 60%

NATIONAL POPULATION POLICY 2000(NPP)

Population policy in general refers to policies intended to decrease the birth rate or growth rate.

National population policy 2000 reaffirms the commitment of the government towards target free approach in administrating family planning services.

The objective of National Population Policy 2000 is to bring the Total Fertility Rate to replacement levels by 2010. The long term objective is to achieve requirements of suitable growth, social development and environment protection.

Some of the important aspects of this policy are:

- Reduction of fertility rate to near replacement level by lowering total fertility rate to 2.1 by the year 2010 & to achieve a stable population by 2045.
- Freezing the proportional quota of Loksabha at the current level till the year 2026 to enable the State Government to pursue population stabilisation without being unfairly found to give up their representation.
- Addressing needs for basic reproductive and child health services

- Reducing Infant Mortality Rate to below 30 per 1000 live births by the year 2010, live birth by the year 2010 and universal in immunization of children against vaccine preventable diseases.

- Encouraging late marriage for girls- not earlier than 18yrs and preferably after 20yrs

- School education up to 14 years of age free and compulsory bringing down the drop out rate to below 20%

- Rewards for couples below poverty line who may after 18 and have their first child after the mother is 21.

- Below poverty line mothers who go for sterilization after second child would be eligible for a health insurance not exceeding Rs.5000/- and a personal accident insurance cover for the spouse.

- Cash incentive of Rs.500/- when a girl child is born (to limit family to two children)

- 100% deliveries by trained persons and 80% institution deliveries

CONTRACEPTIVE METHODS

Contraceptive methods are by definition, preventive methods to helps women avoid unwanted pregnancies. They include all temporary and permanent measures to prevent pregnancy resulting from coitus.

Ideal contraceptive should be safe, effective, acceptable, inexpensive, reversible, simple to administer, independent of coitus, long lasting enough to obviate frequent administration and requiring little or no medical supervision.

The present approach of family planning programme is to provide a ‘cafeteria choice’ that is to offer all methods from which an individual can choose avoiding to his needs and wishes and to promote family planning as a way of life.

The contraceptive methods can be broadly grouped as

I. Spacing methods

1. Barrier Methods
    a) Physical methods
    b) Chemical Methods
    c) Combined methods
2. Intra uterine Devices
3. Hormonal Methods
4. Post Conceptional Methods
5. Miscellaneous

II. Terminal Methods

1. Male sterilization
2. Female Sterilization

Barrier Methods

Barrier methods prevent live sperm from meeting the ovum. The main advantages include protection against Sexually Transmitted Diseases (STD). They require a high motivation from the part of the user. They are only effective if they are used consistently and carefully.

1. Condoms

Condom is the most widely known and used barrier device by the males around the world. It is better known by its trade name "NIRODH". The condom is fitted on erect penis before inter course. The air must be expelled from the teat to make room for ejaculate. The effectiveness if condom can be increased by using it in conjunction with a spermicidal jelly.

Condoms are highly effective method of contraception if they are used correctly at every coitus. Failure late vary enormously, varying from 2-3/100 WY to 14/100 WY. Most failures are due to incorrect use.

Advantages:

They are easily available, safe & in expensive, easy to use, do not require medical supervision, no side effect, light, compact & disposable. It also protects against STDs.

Disadvantages:

(a) It may slip off or tear during coitus due to incorrect use.

(b) Interferes with sex sensation locally about which some complain while other get used to it.

1) Female Condoms :

Female condom is a pouch made of Polyurethane which lines the vagina. An internal ring in the close end of the pouch covers the cervix and an external ring remains outside the vagina. It is prelubricated with silicon & spermicidal need not be used. It is an effective barrier to Sexually Transmitted Diseases infection. Failure rates during first year use very from 5per 100WY pregnancy rate to about 21in typical users

2) Diaphragm :

The Diaphragm is a vaginal barrier, also known as "Dutch Cap" the diaphragm is a shallow cup made of synthetic rubber or plastic material. It ranges in diameter from 5-10cm (2-4 inches). It has to remain in place for at least 6hrs. Failure rate with spermicidal very from 6-12/ 100WY.

INTRAUTERINE METHODS

There are two basic types of Intra Uterine Device.

Medicated and non-medicated

Both are made of polyethylene or other polymers in addition, the medicated or bioactive Intrauterine Device release either metal ions (copper) or hormones (Progestogens).

The non medicated Intrauterine Devices comprise the first generation intrauterine devices. The copper intrauterine devices were the second generation intrauterine devices and the hormone- releasing intrauterine devices the third generation intrauterine devices. The medicated intrauterine devices were developed to reduce the incidence of side effects and to increase the contraceptive effectiveness.

First generation intrauterine devices

They comprise the inert or non-medicated devices usually made of polyethylene or other polymers. They appeared in different sizes shapes –loops, spirals, coils, rings and bows. The best known and commonly used is Lippes loop.

Second generation intrauterine devices

Metallic copper had a strong ant fertility effect. The addition of copper had made it possible to develop smaller devices where are easier to fit, even in nulliparous women.

Earlier devices

- Copper 7
- Copper T-200

Newer devices

Variants of T Device

- T Cu - 220 C

- T Cu – 380 A or Ag

Nova T

Multi load devices

- ML - Cu- 250
- ML - Cu- 375

Advantages of Copper devices

- Lower expulsion rate
- Lower incidence of side effects e.g. Pain bleeding
- Easier to fit even in Nulliparous women
- Better tolerated by Nullipara
- Increased contraceptive effectiveness
- Effectiveness as postcoital contraceptives, if inserted with in 3-5days of unprotected intercourse.

Third generation intrauterine devices

The most widely used is progestasert, which is a T- shaped device filled with 38mg of progesterone releases hormone slowly in the uterus at a rate of 65mcg daily. It has direct effect locally on the uterine lining, on the cervical mucus and possibly on the sperms.

Mechanism of action

Intrauterine device causes a foreign body reaction in the uterus causing cellular and biochemical changes in the endometrium and uterine fluids and is believed that these changes impair the viability of the gamete and thus reduces its chance of fertilization, rather than its implantation.

Copper enhances the cellular response in the endometrium, it also affects the enzymes in the uterus copper ions may effect sperm motility, capacitation and survival.

Progesterone increase the viscosity of the cervical mucus and thereby prevent sperm from entering the cervix. High levels of progesterone and low levels of estrogen sustain endometrium unfavorable to implantation

Effective ness

Lippes Loop	2-3/100WY
Cu T-200	3/100WY
Cu T-380A	05-0.8/100WY
Progesterone IUD	1.3-1.6/100WY

Advantages:

- Simplicity, no hospitalization is required
- Insertion take only few minutes
- Once inserted intrauterine device stays in place as long as required
- Inexpensive
- Effect is reversed by removal
- Virtually free of systemic side effects
- Highest continuation rate
- No need for continual motivation

Contraindication

Absolute:

Suspected pregnancy, Pelvic Inflammtory Diseases,Vaginal bleeding of undiagnosed etiology, cancer of cervix, adnexa, uterus, previous ectopic pregnancy

Relative

Anemia, menorrhagia, history of pelvic inflammatory disease, purulent cervical discharge, unmotivated person

Complication

- Bleeding
- Pain
- Pelvic infection
- Uterine perforation
- Pregnancy
- Ectopic pregnancy
- Expulsion

Hormonal contraceptives

Classification

A. Oral Pills

1. Combined pill
2. Progesterone only pill (POP)
3. Post coital pill
4. Once –a-month (Long acting pill)
5. Male pill

B. Depot(Slow release)formulations

1. Injectables
2. Subcutaneous implants
3. Vaginal rings

1.<u>Combined pills</u>

At the present time, combined pill contain no more than 30-35μg of synthetic estrogen and 0.5 to 1.0mg of a progesterone

Mala - D - Package of 28pills (21 oral contraceptive pills and 7 brown film coated ferrous fumarate tablets)

- Available at a prize of Rs.2/- per packet

Mala-N - free of cost

2. <u>Progesterone only pill</u>

It is commonly referred to as "Mini pill" or "Micro pill". It contains only progesterone, which is given in small does thought the cycle the commonly used progestogens are Norethisterone and Levonergesterol.

3. <u>Post coital contraception:</u>

It is recommend with in 48hrs of unprotected intercourse two methods are

a) Hormonal

i. High dose oral estrogen –Diethyl stilbesterol 50mg daily in divided doses for 5days

ii. Yuzpe regimen: double dose of standard pill, when most pills contain 50μg estrogen of the recommended regimen is 2 pill immediately followed by another 2 pills 2 hrs later. Today's pill contain 30-35μg of estrogen, so women must taken 4 pills rather than 2 pills

iii. Levonogesterol 0.75mg pill- one pill as soon as possible with a second dose of same amount after 12hrs,both being administered within 72hrs

b) Intrauterine device : the simplest technique is to insert an Intrauterine device if acceptable, especially a copper device with in 5days.

4. <u>Once a month pill</u>

Quinesterol a long acting estrogen is given in combination with short acting progesterone

5. <u>Male Pill</u>

It is made of gossypol a derivative of cotton seed oil, effective in producing oligozoospermia or azoospermia, but as many as 10% of them may be permanently azoospermic after taking it for 6months.

Effectiveness

Combined pills are almost 100% effective. Some women don't take them regularly, so actual rate is lower.

Risks

1) Cardiovascular side effects

40% higher death rate than women who had never taken the pill, positively associated with estrogen content of the pill.

1) Carcinogenesis

Increasing risk of cervical cancer with increasing duration of use.

2) Metabolic effects

Elevated blood pressure decreased high density lipoproteins, blood clotting and the ability to modify carbohydrate metabolism with resultant elevation of blood glucose and plasma insulin. This is related to progestogen content.

4) Liver disorders- hepatocellular adenoma

5) Lactation – adversely affect lactation- quantity and constituents of breast milk

6) Ectopic pregnancies –more likely with progesterone only pills

7) Others: Beast tenderness, weight gain, headache and migraine, bleeding disturbances.

CONTRAINDICATIONS

Absolute: Cancer of Breast and genitals, Liver diseases, previous or present history of thromboembolism, congenital hyperlipidemia, undiagnosed abnormal uterine bleeding

Relative: Age >40yrs, smoking and age >35yrs

Mild hypertension, chronic renal disease, epilepsy, migraine, diabetes mellitus nursing mothers in first 6 months.

DEPOT FORMULATIONS:

(1) Injectables

(i) Progestogen only pills

- DMPA (Depot Medroxy Progresterone Acetate)
- NET- EN (Northisterone Enanthate)

(ii) Combined injectables contraceptives

(2) Subdermal implants : Norplant

(3) Vaginal rings

POST CONCEPTIONAL METHODS

(1) Menstrual regulation:

It consists of aspiration of uterine contents 6-14days of a missed period, but before pregnancy test can accurately determine whether a women is pregnant or not.

(2) Menstrual induction: Abortion

Abortion is theoretically defined as termination of pregnancy before the fetus becomes viable (capable of living independently)

Legalization of Abortion

The medical termination of pregnancy act was passed by the Indian Parliament in 1971 and came to force April 1,1972 except in Jammu Kashmir, where it came to effect from Nov.1,1976.

MISCELLANEOUS

Abstinence

The only method of birth control which is completely effective, as sexual abstinence. It is sound in theory, in practice, an over simplification. It amounts to repression of a natural force and is liable to manifest itself in other direction such temperamental changes and even nervous breakdown, therefore it can hardly be considered as a method of contraception to be advocated to the masses.

COITUS INTERUPTUS

The male with draws before ejaculation and therefore tries to prevent deposition of semen into the vagina. The drawback is that the precoital secretion of the male contains sperm, even as drop of semen is sufficient to cause pregnancy. Therefore failure rate may be as high a 25%.

Safe period

This also known as calendar method, is based on the fact that ovulation occurs from 12 to16 day before the onset of menstruation the days in which conception is likely to occur is shortest cycles minus 18 days gives the first day of the fertile period. The longest cycle minus 10days gives the last day of the fertile period.

Natural methods

Basal body temperature methods (BBT)

The rise of BBT at the time of ovulation as a result of increase in progesterone. The rise is very small 0.3-0.5^{0}C measured before getting out of the bed. Basal Body Temperature Methods is reliable if intercourse is restricted to infertile days of postovulatory period.

Cervical mucus method: Billings method

At the ovulation, cervical mucus becomes watery clear resembling raw egg white, smooth, slippery &profuse. After ovulation, under the influence if progesterone, the mucus thickens and lessens in quantity. This method needs a high degree of motivation than others.

SYMPTOTHERMIC METHOD

This method combines the temperature, cervical mucus and calendar techniques for identifying fertile period.

BREAST FEEDING

Lactation prolongs postpartum amenorrhea and provides some of protection against pregnancy .No more than 5-10% of women conceive during lactational amenorrhea.

TERMINAL METHODS

MALE STERILIZATION

In vasectomy it is customary to remove a piece of vas at least 1cm after clamping the ends are ligated and then folded back on themselves and sutured into position, so that the cut ends face away from each others.

NO SCALPEL VASECTOMY

This is a new technique that is safe, convenient and acceptable to makes this is funded by UNFPA.

FEMALE STERILIZATION

This can be done as a interval procedure, postpartum, or at the time of abortion. Two procedures are common;

Laparoscopy

The abdomen is approached though laparoscope and once the tubes are accessible the falope rings or clips are applied to occlude the tubes.

Minilaparotomy

This is a modification of abdominal tubectomy, a smaller abdominal incision of only 2.5-3cm, conducted under local anesthesia. This is suitable for postpartum sterilization.

UNMET NEED AND FAMILY PLANNING PROGRAMS

Many women who are sexually active would prefer to avoid becoming pregnant but nevertheless are not using any method of contraception. These women are considered to have an ‘unmet need’ for family planning. The concept of unmet need points to gap between some women’s reproductive intention and their contraceptive behavior. In doing so, it poses a challenge to family planning programs, to reach and serve the millions of women whose

reproductive attitude resembles those of contraceptive users but who for some reasons or combination of reasons are not using contraception.

Among the most common reasons for unmet need are:

1. Inconvenient or unsatisfactory services

2. Difficulties with access to and quality of services and supplies

3. Lack of information

4. Health concerns about contraceptives and side effects

5. Opposition from husbands, families and communities

6. Little perceived risk of pregnancy

1) In 1972, based on analysis of women's responses to three KAP surveys in Taiwan, Ronald Friedman and colleagues first identified a specified group of women who might be expected to adopt contraception – even without changing their desired family size because they wanted to have no more children but were not using contraception. In 1974, Friedman and Lolagene coombs for the first time used survey data to identify the size of this group in several countries, and they found it to be substantial. They carried the term "discrepant behaviour" to describe the status of such women. Similar evidence of discrepant behaviour cause from surveys of young people in the early 1970s, where Leo Morris found a significant gap between the need for family planning and its use.
2) One of the first published uses of the term "unmet need" appeared in 1977, when Bruce Stokes, citing both the evidence from KAP studies in developing countries and fertility surveys in the US, wrote that "in disparate ways, the number of ill timed pregnancies and wide spread reliance of abortion among all social classes and groups signal an unmet need for contraception.
3) The world fertility survey (WFS), conducted from 1972 to 1984, was the first to report extensively about unmet need. The concept was so important to researchers that, when data first became available, unmeet need was the

first topics analyzed. In 1978, based on WFS data from five Asian countries, Charles West off published the first comparative estimates of unmet need for limiting births. The WFS questionnaire did not ask women above their desire to space births. Also, at that time West off excluded pregnant and amenorrhoeic women because they did not currently need contraception.

4) John Mao, Chandigarh, India in his study on knowledge, Attitude, practice of family planning. A study of Tezu village, Manipur (India), has shown that maximum educational level of the respondents is Matric . 48% of respondents had the knowledge of tubectomy. 60% are satisfied about the method of family planning they are using, 44% say that is through friends they come to know about contraception. The percentage is high regarding the attitude towards approval of abortion 56% of the respondents agrees to use a method to delay or avoid pregnancy[26].
5) Virginia Morrison (2000) in the study on contraceptive need among Cambodian refugees in Khao Phlu Camp collected data on KAP from a sample of 102 women in refuges camp in Thailand, revealed that 82% of women wanted to stop or delay child bearing, only 12% of all women interviewed reported using a modern method of contraception. Reasons for nonuse include: 24% lack of information, 20% current illness, 42% discomfort over seeking contraceptives. Few midwives, no traditional birth

attendant and none of the women or men knew about emergency contraception[33].

6) Minazur Rahman Ph.D. Matlab Bangladesh, in his evidence from Mattlab, Bangladesh has shown that abortion rates are significantly lower in areas with better family planning practices. Abortion may increase during fertility transition in developing countries as the desire to limit family size increases, unless there is widespread availability of quality family planning services.

7) Sreevatsava et al in their study on contraceptive KAP survey have shown that 82.2% of women were aware of the existence of a contraceptive method, but only 44.2% ever used one. The commonly used method was condom (34.5%) 82.6% were willing to undergo tubectomy in future whereas only 20.3% were willing to use intrauterine contraceptive device[18].

8) Dabral S & Malik SL in their demographic study of Gujjars of Delhi (2004) analyzed the attitude of ever married women towards family planning messages on Radio / TV reflects that media messages are acceptable to 4/5th of women. Broadcasting of family planning messages are acceptable to women who have completed primary school as well as those below 30 years of age. Over 90% of currently married nonsterilised women approved of family planning use. More than half of the women reported that they have

discussed about family planning methods with their husbands reflecting lack of spousal communication regarding family planning[11].

MATERIALS AND METHODS

This study called the KAP survey –Knowledge, attitude and practices survey was conducted on a small sample of specific population, and is more descriptive in character.

The study was conducted in Govt. R.S.R.M Hospital during the period July 2006- June 2007.

Women were categorized into three groups namely

Group A : Women coming for antenatal visit

Group B : Postnatal women

Group C : Women seeking MTP

Total number of women surveyed were 1969 of which 950 in Group A, 969 were in group B and 50 women in group C,

The study was done using a predesigned questionnaire.

The data were analyzed to know the factors which affected their knowledge about contraception and their attitude towards contraception which in turn influenced their practices (past, present & future).

RESULTS

TABLE 1

SOCIODEMOGRAPHIC CHARACTERISTICS

Characteristics	Group A	Group B	Group C	Total
Age				
14-19 yrs	155 (16.3)	347 (35.8)	3 (6.0)	505 (25.6)
20-29 yrs	759 (79.8)	615 (63.4)	31 (62.0)	405 (71.3)
30-39yrs	36 (3.7)	7 (0.7)	15 (30.0)	58 (2.9)
40-45yrs			1 (1.0)	1 (0.05)
Martial status				
Married	950 (100)	969 (100)	45 (90)	1964 (99.7)
Unmarried			5 (10)	5 (0.2)
Separated				
Education				
Illiterate	156 (16.4)	243 (25)	14 (28.0)	413 (20.9)
Primary	145 (15.6)	110 (11.3)	11 (22.0)	266 (13.5)
High School +Higher secondary	625 (65.7)	579 (59.7)	25 (50.0)	1229 (62.4)
Graduate/Diploma	24 (2.5)	37 (3.811)	-	61 (3.0)
Religion				
Hindu	868(9.13)	882 (91.0)	47(94.07)	1797 (91.2)
Muslim	60 (6.3)	69 (7.1)	1 (2.0)	130 (6.6)
Christian	22 (2.3)	18 (1.8)	2 (4.0)	42 (2.1)

Figures in brackets represents percentages.

TABLE 2

PARITY

Parity	Group A	Group B	Group C
P_0	538 (56.6)		5 (10.0)
P_1	345 (36.3)	568 (58.6)	2 (4.0)
P_2	58 (6.1)	328 (33.8)	33 (66.0)
P_3	7 (0.7)	63 (6.5)	6 (12.0)
P_4	2 (0.2)	8 (0.8)	2 (4.0)
P_5		2 (0.2)	2 (4.0)

Figures in brackets represent percentages

TABLE 3

AWARENESS OF CONTRACEPTIVE METHODS

Method	Group A	Group B	Group C	Total
Natural[a]	238 (24.8)	190 (19.6)	2 (4.0)	430 (21.8)
Condom	583 (61.3)	578 (59.6)	36 (72.0)	1197 (60.7)
Cral Pills	164 (17.2)	246 (25.3)	15 (30.0)	425 (21.5)
Injectables	25 (2.6)	36 (3.7)	-	61 (3.0)
Intrauterine Contraceptive Device	316 (33.2)	395 (40.7)	20 (40.0)	731 (37.1)
Emergency Contraception	1 (0.1)	-	-	1 (0.05)
Female sterilization	678 (71.3)	843 (86.9)	46 (92.0)	1567 (79.5)
Male Sterilization	135 (14.2)	253 (26.1)	22 (44.0)	410 (20.8)
Medical Abortion[b]	168 (17.6)	354 (36.5)	45 (90.0)	567 (28.7)
None	89 (9.0)	76 (7.8)	3 (6.0)	165 (8.3)

Figures in brackets represent Percentages

a. Natural Methods- Breast Feeding, Withdrawal and calendar method
b. Not a method of contraception

TABLE :4

CONTRACEPTIVE METHODS PREVIOUSLY USED

Method	Group A	Group B	Group C	Total
Natural[a]	148 (15.5)	112 (11.5)	1 (2.0)	261 (13.2)
Condom	169 (13.5)	157 (16.2)	13 (26.0)	299(15.1)
OralPills	50 (5.2)	32 (3.3)	-	82 (4.1)
Injectables	14 (1.4)	8 (0.8)	-	22 (1.1)
Intrauterine Contraception	69 (7.2)	39 (4.0)	3 (6.0)	111 (5.6)
Female Sterilization[b]	-	-	1 (2.0)	1 (0.05)
Male Sterilization	-	-	-	-
Emergency Contraception	-	-	-	-
Medical Abortion[c]	23 (2.4)	15 (1.5)	8 (16.0)	46 (2.3)
None	556 (58.8)	591 (60.9)	31 (62.0)	1178 (59.8)

Figures in brackets represent percentages

a. Natural methods –breast feeding withdrawal and calendar method
b. Female sterilization failure cases
c. Not a method of contraception

TABLE.5

LITERACY AND USE OF CONTRACEPTIVE METHODS

Education station	Group A		Group B		Group C	
	No	%	No	%	No	%
Illiterate	44	28.2	46	18.9	5	35.7
Primary	41	28.2	40	36.3	4	36.3
High School + Higher secondary	292	46.7	290	50.0	10	40.0
Graduate	17	70.8	19	57.3	-	-

TABLE 6

CHOICE OF METHOD FOR FUTURE USE

Method	Group A	Group B	Group C	Total
Condom	134 (14.1)	115 (11.8)	-	249 (12.6)
Oral Pills	53 (5.5)	44 (4.5)	-	97 (4.9)
Injectables	22 (2.3)	23 (2.3)	-	45 (2.2)
Intrauterine Contraception device	106 (11.1)	136 (14.0)	4 (8.0)	246 (12.4)
Emergency Contraception	56 (5.8)	49 (5.0)	-	105 (5.3)
Female Sterilization	625 (65.7)	818 (84.4)	41.(82.0)	1484 (175.3)
Male Sterilization	-	-	-	-
Medical Abortion[a]	9 (0.9)	21 (2.1)	-	30 (1.5)
None	69 (7.2)	44 (4.5)	5 (10.0)	118 (5.9)
Undivided	54 (5.6)	91 (9.3)	-	145 (7.3)

Figures in brackets represent percentages

a. Not a method of contraception

TABLE 7

REASONS FOR NOT UNDERGOING STERILIZATION

Reason	No
Want of Male/ Female Child	5
Health does not permit	3
Worry of side effects	1
Afraid of sterilization/ Surgery	1
Opposition of Husband/Relatives	2
Total	12

TABLE 8

ATTITUDE TOWARDS FAMILY PLANNING

S.No	Attitude	Percentage	Number
1.	Approve	86.1	1695
2.	Disapprove	4.1	82
3.	Do not Know	9.8	192

TABLE 9

ACCEPTABILITY OF MEDIA MESSAGE

Age in yrs	Acceptability of media Message		Total %		No. of Women
	Yes	No	Yes	No	
14-19	476	29	94.2	5.8	505
20-29	1334	71	94.9	5.1	1405
30-39	42	16	72.4	27.6	58
40-49	1	-	100	-	1

TABLE 10

SOURCE OF KNOWLEDGE

Source	Group A	Group B	Group C	Total
Family/friends/ relatives	225 (23.6)	382 (39.4)	34 (68.0)	641 (32.5)
TV/Radio	150 (15.7)	214 (22.0)	18 (36.0)	382 (19.4)
Newspaper / Magazine	96 (10.1)	101 (10.4)	4 (8.0)	201 (10.2)
Medical Personal	229 (24.1)	186 (19.1)	21 (42.0)	436 (22.1)
School/ Collage	11 (1.1)	23 (2.3)	-	34 (17)
Do not Know	86 (9.0)	76 (7.8)	3 (6.0)	165 (8.3)

Figures in brackets represent percentages

DISCUSSION

SOCIODEMOGRAPHIC CHARACTERS

The Socio demographic characters of the group studied were shown in **Table: 1** Among all the women studies 25.6% of them are in the age group of 14-19yrs. Majority if them were in the age group of 20-29yrs (71.3%). Few were in the age group of 30-39yrs (2.92%).

Among the antenatal and postnatal women all were married 10% of women seeking MTP were unmarried.

Education is the Prime influencing factor. It may have direct influence on fertility, since education affects the attitudinal and behavioral patterns in the individuals. In the present study, a substantial proportion of the populations were illiterate (20.9 %). About 13.5% of them were educated till primary school. Majority of them 02.4% had high school and higher secondary education. Only a minority of them (3.0%) were graduate.

This group was reflective of the general population with majority of them being Hindus (91.2%), 6.6% them being Muslims and 2.1% of them Christians.

PARITY

Among the antenatal women, majority of them were primi (56.6%), and the number decreased as parity increased, the same had reflected on the postnatal women as shown in table2. Majority of Women (66.0%) seeking medical termination of pregnancy were mostly carrying their third pregnancies.

Higher order pregnancies ($P_{3,}P_{4,}P_{5}$) were fewer in number.

AWARENESS

The Knowledge among the women studied was wide spread as shown in Table-3. Almost 91.9% were aware of at least one method of Contraception. Almost 70% of them were aware of at least one modern method of contraception.

The most popular method was female sterilization among 79.5% of women followed by condoms (60.7%).

Intrauterine contraception device was known by 37.1% of women.

The Popularity of the condoms was due to the awareness created in the hospital during admission or antenatal visits by the National AIDS control organization (NACO) for pretest counseling during HIV Screening.

It is shocking to see that almost nobody was aware of the existence of the Emergency contraception.

This differed from the study done by Sreevatsava et al in which most common temporary method was intrauterine contraceptive device (61.2%) and Emergency contraception was known to only 1.1% of women[18].

PREVIOUS USE OF CONTRACEPTIVE

Previous use of any contraceptive method was shown in table 3.

Though 91.7% of the women were aware of any method of contraception, only 40.2% had used contraception.

The most commonly used method was condom, (15.1%), followed by natural methods (13.2%).

There was only one women came for MTP, following sterilization failure.

Majority of them (59.8%) have not used any method of contraception. 23% of them had previous medical termination of pregnancy.

LITERACY

Literacy is an important factor influencing the attitude towards family planning practices. Illiterate women among all group were fewer in number to

use family planning practices as shown in Table 5. Better education leads to improved use of family planning practices.

CHOICE OF METHOD FOR FUTURE USE

Most of the women opted for a permanent method than temporary method as shown in table 6.

Female sterilization was the method of choice for 75.3% women.

Condoms were chosen by 12.6% of women for their future use, Intrauterine device by 12.4% of women.

About 5.9% of women refused any form of contraception and 7.3% of women told that they were undecided at present and would choose any one in future.

Among antenatal women, 8.4% of women did not prefer temporary method and they wished for permanent method in future after completing their family.

Among postnatal women, 6.0% of women did not prefer a temporary method. Twelve women (91.2%) were not willing to undergo sterilization, reasons include – want of male / female child, not in good health, opposition of

husband / relatives as shown in Table 7.

Majority of the women were not able to say whether their husbands would undergo male sterilization. This showed lack of spousal communication in the couples as shown in the study by Dabral S et al who showed more than half of women have discussed about family planning methods with their husbands[11].

ATTITUDE

The analysis of attitude of the women towards approval of family planning practices showed that, 86.1% of women approved family planning practices, 9.8% did not know about the influences and consequences of FP practices, but 4.1% disapproved its use, as shown in table 8.

Attitude of women towards acceptability of FP messages via Radio / TV was 90.6%. Relatively older women, women who are illiterate did not consider broad casting of FP messages acceptable as shown in table 9. On the other hand, attitude towards acceptability of FP messages are highly favorable among women who have completed primary school and above, as well as those below 30 years of age. Education is a significant factor that influences the attitude and abilities of women. Also, FP is more acceptable to younger women as

similarly shown by Dabral S et al in their study of attitude towards family planning practices[11].

SOURCE OF KNOWLEDGE

The most important source of information was family including relatives and friends, about 32.5% as shown in Table 10. Mass media accounts to 19.4%. Newspaper & magazine account for 10.2% of the source of knowledge though cheaper, it was used only by literate people. 8.3% of women were not aware of any method of contraception as shown by John Mao in his study[26]. Family, friends and relation contribute to 78% of source of knowledge.

FURTHER SCOPE AND RECOMMENDATIONS

Approaches to meeting unmet need: An illustrative checklist.

i) To improve access to good quality.

- Offer a choice of more contraceptive method, such as injectables.
- Encourage wider commercial sales of contraception, through more outlets.
- Start or expand social marketing programs.
- Train providers in empathic, respectful counseling and interpersonal relation with clients.
- Provide privacy for client counseling and procedures.
- Reduce clients waiting time and paperwork. Improve client flow pattern in health care facilities.
- Keep contraceptives in stock.

ii) To address health concerns and side effects.

- Address facts and truth about family planning and health in mass media communication discuss specific methods.
- Train providers to manage side effects and counsel clients who return with complaints.
- That counseling covers side effects thoroughly including whether they are likely to go away, what can be done about them and whether they are signs of more serious problems that need medical attention.
- Employ a broad range of FP methods so that clients easily switch methods without risking pregnancy.
- Empty the testimonials of satisfied contraceptive users to address the concerns of those who have never used methods.

iii) To increase knowledge

- Expand mass media communication to provide information about methods and their use, using especially Radio / TV but also printing materials.

- Inform communities about methods at pubic meeting and community events such as theatres.

- Train FP providers to answer clients' questions and concerns about contraceptive methods.

iv) To overcome husband's opposition

- Address men directly with information about benefits and safety of family planning, recognizing men's often – dominating role in decision making but promoting equal participation of women too.

- Offer FP services for men and offer them in sittings that men find comfortable.

- Demonstrate that FP is the community norm and responsible behavior, endorsed by religious and civic leaders.

- Help women learn how they can talk with their partners about FP including how to start the discussions.

SUMMARY

The main objective of family planning programme is to spread the knowledge of family planning method and develop among people, the attitude favorable for adoption of contraceptive method. The progress achieved in this sphere is normally assessed from the result of KAP survey.

The aim of the study was to know the knowledge attitude towards contraception and practice of contraception, to identify relationship between FP practices and educational level, as well as the source of knowledge.

Women were categorized into three groups, with antenatal women in group A, postnatal women in group B women seeking Medical Termination of Pregnancy.

The study was done using a predesigned questionnaire.

Majority of them were in the age group of 20-29 years (77.3%). Almost all of them were married (62.4%) of women were educated till high school and higher secondary level.

At least 70% of them were aware of any one of modern method of contraception. Condoms were the most popular temporary method (60.7%) and female sterilization is the most popular permanent method (79.5%).

Only 40.2% had used at least one method of contraceptive. Most commonly used method was condom (15.7%) followed by natural method (18.2%).

Most women preferred permanent method to temporary method. Female sterilization was the method of choice in 75.3% of women.

The important source of information was family including friends and relatives to about 32.5%. Other important sources include Radio / TV + Medical personnel.

Reasons for unmet needs are:

1) Difficulties with access and quality of family planning services and supplies
2) Health concerns about contraception and side effects
3) Lack of information
4) Opposition from husbands, families and communities.
5) Little perceived risk of pregnancy.

Measures to improve family planning series include

ii) Strengthening existing strategies and to sharpen the forms of existing infrastructure for delivery of quality service.

iii) Expand the basket of choices for contraceptive taking into account a variety of new demands arising from latent and manifest changes and to improve easy availability of wider choice through more channels for distribution.

iv) Link FP services to new opportunities arising from decentralization and economic reforms such as health insurance, concern for human rights and statutory right to information.

CONCLUSION

This study reveals good knowledge and favorable attitude towards family planning, though practices are poor.

The knowledge of Family Planning is wide spread among the respondents though it is more among literate women. The important source of information are family and friends and relatives. Ongoing motivation and spread of knowledge about Family Planning measures is important to improve the attitude and practices of contraception.

BIBLIOGRAPHY

1) Park .K, Park's, text book of Preventive and social medicine, 17edition, 325 -58.

2) National population Policy 2000

3) Censes Report, Census Report 2001, Govt of India, New Delhi.

4) Census Report, Census Report,1991, Govt of India, New Delhi,

5) SRS India; Sample Registration System, Register General and Census Commissioner, Govt of India, New Delhi; 1989,1990,1999,2001,2003.

6) 4th 5year Plan

7) Bongaarts J. Population and development Review. 1978;(4);105.

8) WHO Contraceptive Method Mix Geneva; WHO, 1994.

9) WHO Health Benefits of family planning Geneva ;WHO 1995

10)WHO Natural family Planning Geneva ;1993.

11)Debral S & Malik SL-Demographic Study of Gujjars of Delhi IV-KAP of FP-J of Human Ecology, 16(4) ;231-237(2004)

12)Bora RS& Jha MS ;Factors influencing the use of contraceptive. A study of Rural Delhi-Demography India,30(2); 299-311(2001)

13)Bora RS, Malik P, Kulkarni; Operational Research on spacing, methods; A comparative study for rural Delhi Report Submitted to the Ministry of Health & FW-Govt (1998)

14)Bumpers LL-The Risk of an unwanted birth the changing content of contraceptive sterilization in the US Population studies, 41;347-363(1987)

15)Chako, CK; Fertility and Contraceptive practice among religions minorities in to districts of Tamil Nadu Research Compendium; funding and implication of population &health studies 1964-87, The Gandhi gram Institute of Rural Health & FW Trust, Gandhi gram, TN 1998.

16)Dharmaligam A, the Social context of Family planning in South Indian Village, International FP perspective 21(3);98-103,sep 1995.

17)RamaRao S. and Townsend J.N- Unmet need and the situation of women in India. Presented Association in America, Sanfracisco ,April 1995.12p

18)Sreevatsava,Reena and Collages, Contraceptive knowledge Altitude and Practices Survey – JOGI vol 55, No6, Nov/Dec P8 546-550.

19)Unmet need for contraceptive –Economic and Political week by, Jan 18,2003

20)N.PDas and Urvi Shah –PRCs and other governmental Health organization (D&E) cells & officers of the directors of the respective states – Understanding of the Women's Reproductive health needs in rural areas of Gujarat.

21)KAP Studies among prostitutes- Journal for china AID/STD Preventive control Vol 6,No.1, Feb 2000

22)Male involvement in FP Series through KAP, NIFHW-1998 & 1999.

23)ROY SK, study of KAP of the private medical practitioners about national disease control program.

24)Ashok mandaletal, KAP of Emergency contraception among beneficiaries and providers- JIMA-out 2006

25)Chatterjea T, study of contraceptive use in slum community of Kolkata – IMJ 2006 100(8) 274-276.

26)John Mao Knowledge attitude and Practice of family planning a study Tezu Village, Manipur (India) The internet Journal of Biology Anthropology2007.vol1,No.1

27)Bhat PNM.Contours of fertility decline in India A district level study based on the 1991 census Srinivasam K. editor, Population Policy and reproduction Health New Delhi; Hindustan Publications 1996.

28) Ramesh BM,Gulathi \SC, Rutherford RD, Contraceptive use in India 1992-93. IIPS ,Mumbai and Honolulu East-west center National Family Health Survey Subject Report No. 1996.

29)Gautam AC,sethu PK, Appraisal of the Knowledge attitude and practices (KAP) of family control devices among rural Rajputs and schedules caste of Hatwar area of Bilaspur district Himachalpradesh 2001; Anthropologist, 4(4) ;289-292.

30)Takkar.N Goel P, Sha PK, Dua D, Contraceptive practices and awareness of emergency contraceptive in educated working women. Indian J.Med sci(Serial online) 2005 (Cited april4), 59;143-149.

31)Amonker RG, Brinker GD, The level of development and knowledge attitude and practice and practice of FP in India, Social Development issues 2000;23(2)

32)Rao AAK, Client demand approach (CDA)in the revise family welfare programme –A feasibility study Regional health Forum WHO East Asia Region 2005;5(2).

33)Virginia Morrison, Contraceptive Need among Cambodian refugees in Khao Phlu Camp, International Family planning Perspectives, 2000 26(4) 188-192.

34)Das Gupta N, Selective Discrimination against female children in Rural Punjab, India Population and development Review ,B; 77-100(1987)

35)Gandotra MM, Das NP, Contraceptive choice shifted and VSE contamination , A prospective study- Journal of family welfare, 36(3) 54-69 (1990)

36)Gold Schneider C, & Moshe W.D; Religion affliction and contraceptive usage changing American pattern 1951-82, studies in FP 19;48-57 (1998)

37)International Institute of Population science National family heath survey (NFHS) 1998-99, Delhi ,Mumbai(2002)

38)Kamal N, inter spousal communication on FP as a determinant of use of modern conception in Bangladesh, Journal of FW, 45(1); 31-43 (1993)

39)Raja ram S, Timing of sterilization in two low fertility states, Demography India, 27.8; 179-191(1998)

40)Rajarethnam T, Socio cultural determinates of contraceptive method choice in Goa & Kerala, India, Journal of FW ;46(2) ;1-11(2000)

41)WHO. Health education in health aspects of family planning technical report series No.483(1971)

42)Charles F, Westoff: Is the KAP gap real - population and Development Review Vol14, No, 2,225-232, Jun 1998.

43)Bangarrts J. The KAP gap and unmeet need for contraception Population Development Review 17(2); 293-313, June 1991.

44)Manoj Kumar Raut communication and contraceptive behaviors. Insight and evidence from India and Bangladesh. Seminar papers submitted in partial fulfillment of month of population studies for the year 2005 – 2006.

45)Kaur KP – Knowledge regarding FP methods among rural women of Faridkot district of Punjab, India Journal of Behavior 191 Jul; 15(3) 49-55.

46)Sharma V. Sharma A – Family planning practices among tribal of south Rajasthan, India – Journal of Resident education of Indian Medicine 1991 – Oct. – Dec. 10(4) : 5-9.

47)Roy M, Lahini BC, Ghosh BN – A KAP study on MTP acceptors and their contraceptive practice. Indian Journal of Public Health 1975 Apr – Jun; 22(27) 89-96.

48)Taneja RN – Fertility, knowledge, attitude and practices (KAP) study in relation to FP via selected population of the Armed forces – Armed forces Med. J. India – 1972; 28(1) : 1022 – 107.

49)Young LK, Farguhar CM, the Cowan LME et al. The contraceptive practice of women seeking termination of pregnancy in an Auckland Clinic. NZ Med. J. 1994; 107 : 189 – 191.

50)Broham DR, Cartmill RS. Knowledge in use of secondary contraception among patients requesting termination of pregnancy. BMJ 1993; 306; 556-557.

PROFORMA

Knowledge, attitude and Practices of Contraception

Name : Address:

Age : Occupation:

I.P.No. : Parity Status:

1. **Socio demographic Characters:**

a. Age

b. Marital Status

c. Educational Status

d. Religion

2. Abortion / Parity

3. Awareness of contraceptive methods

Natural methods

Condoms

Oral pills

Emergency contraception

Injectables

IUD

Male Sterilization

Female Sterilization

Medical Abortion

None

4. Contraceptive methods previously used.

5. Contraceptive methods for future use

6. Source of knowledge

Radio

TV

Newspaper

Family / Relatives / Friends

Medical Personnel

School

Don’t’ know

7. Reasons for not accepting sterilization procedure

8. Acceptability of family planning messages in media Yes/No

9. Attitude towards family planning

Approve

Disapprove

Don’t know

GLOSSARY

WHO	-	World Health Organization
FP	-	Family Planning
KAP	-	Knowledge, Attitude and Practices
MTP	-	Medical Termination of Pregnancy
WY	-	Women Years
IUD	-	Intra uterine Device
C	-	Condoms
FS	-	Female Sterilisation
MS	-	Male Sterilisation
OCP	-	Oral Contraceptive Pills
NAT MET	-	Natural Methods
WDM	-	Withdrawal Method
MP	-	Medical Personnel
CUT	-	Copper - T